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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/532,469

04/22/2005

Fabio Vignoli

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS

P.O. BOX 3001

BRIARCLIFF MANOR, NY 10510

EXAMINER

JONES, DANIELLE E

ART UNIT

PAPER NUMBER

2626

MAIL DATE

DELIVERY MODE

10/17/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/532,469	Applicant(s) VIGNOLI, FABIO	
	Examiner Danelle E. Jones	Art Unit 2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>12/9/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schroder et al. US 7,136,817 in view of Kaufholz.

Regarding **claims 1 and 9**, Schroder et al. discloses a speech control unit for controlling an apparatus on basis of speech, comprising:

a microphone array, comprising multiple microphones for receiving respective audio signals (see col. 4, lines 44-46);

and a speech recognition unit for creating an instruction for the apparatus based on recognized speech items of the speech signal (see col. 4, lines 60-62, where the commands are recognized speech items), characterized in comprising a keyword recognition system for recognition of a predetermined keyword that is spoken by the user and which is represented by a particular audio signal and the speech control unit being arranged to control the beam forming module (see col. 4, lines 60-62, where the commands are the predetermined keywords spoken), on basis of the recognition of the predetermined keyword, in order to enhance second components of the audio signals

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which represent a subsequent utterance originating from a second orientation of the user relative to the microphone array (see col. 2, lines 38-44).

Schroder et al. does not disclose a beam forming module for extracting a speech signal of a user. However this feature is well known in the art as indicated by Kaufholz. Kaufholz discloses a speech recognition apparatus that utilizes a beam former that creates a higher performance and resolution of the resulting microphone signal (see col. 5, lines 8-13). Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize a beam forming module with the apparatus of Kaufholz for the benefit of a higher performance and resolution of the resulting microphone signal.

Regarding **claim 2**, Schroder et al. discloses a speech control unit as claimed in claim 1, characterized in that the keyword recognition system is arranged to recognize the predetermined keyword that is spoken by another user and the speech control unit being arranged to control the beam forming module, on basis of this recognition, in order to enhance third components of the audio signals which represent another utterance originating from a third orientation of the other user relative to the microphone array (see col. 2, lines 35-44).

Regarding **claim 3**, Schroder et al. discloses a speech control unit as claimed in claim 1, characterized in that a first one of the microphones of the microphone array is arranged to provide the particular audio signal to the keyword recognition system (see

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col. 4, lines 56-62).

Regarding **claim 4**, Schroder et al. discloses a speech control unit as claimed in claim 1, characterized in that the beam forming module is arranged to determine a first position of the user relative to the microphone array (see col. 4, lines 51-56).

Regarding **claim 5**, Schroder et al. discloses an apparatus comprising:
a speech control unit for controlling the apparatus on basis of speech as claimed in claim 1 (see col. 4, lines 60-62); and processing means for execution of the instruction being created by the speech control unit (see col. 4, lines 60-62)

Regarding **claim 6**, Schroder et al. discloses an apparatus as claimed in claim 5, characterized in being arranged to show that the predetermined keyword has been recognized (see fig. 1, col. 3, lines 32-45).

Regarding **claim 7**, Schroder et al. discloses an apparatus as claimed in claim 6, characterized in comprising audio generating means for generating an audio signal in order to show that the predetermined keyword has been recognized (see fig. 1, col. 3, lines 32-45).

Regarding **claim 8**, Schroder et al. discloses a consumer electronics system comprising the apparatus as claimed in claim 5 (see col. 4, lines 63-65).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Danelle E. Jones whose telephone number is 571-270-1241. The examiner can normally be reached on M-F 7:30am - 5:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on 571-272-7602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DJ
10/10/2007


RICHEMOND DORVIL
SUPERVISORY PATENT EXAMINER